

What is claimed is:

1. A radio communications control system for controlling transmission power of a shared control channel for transmitting control signals to a plurality of mobile stations; the system
5 comprising:

a transmission power controller configured to control the transmission power of the shared control channel, in accordance with transmission power of a dedicated channel accompanying the shared control channel, and communication quality of the shared
10 control channel.

2. The radio communications control system as set forth in claim 1, wherein the transmission power controller is arranged to set the transmission power of the shared control channel,
15 by changing the transmission power of the dedicated channel based on a power offset; and

the transmission power controller is arranged to control the power offset in accordance with the communication quality of the shared control channel.

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3. The radio communications control system as set forth in claim 2, wherein the transmission power controller is arranged to use a block error rate of the shared control channel, as the communication quality of the shared control channel; and

25 the transmission power controller is arranged to control the power offset so that the block error rate of the shared control channel can be a target value.

4. The radio communications control system as set forth in

claim 2, wherein a shared packet channel for transmitting packet data to the plurality of mobile stations is transmitted after the shared control channel;

the transmission power controller is arranged to use
5 feedback information used for retransmission control in the shared packet channel, as the communication quality of the shared control channel; and

the transmission power controller is arranged to decrease the power offset when receiving the feedback information, and
10 to increase the power offset when not receiving the feedback information.

5. The radio communications control system as set forth in claim 2, wherein a shared packet channel for transmitting packet
15 data to the plurality of mobile stations is transmitted after the shared control channel; and

the transmission power controller is arranged to control the power offset in accordance with a service type of the shared packet channel.

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6. The radio communications control system as set forth in claim 1, further comprising a maximum transmission power controller configured to control a maximum transmission power of the shared control channel during a predetermined period;

25 and wherein the transmission power controller is arranged to control the transmission power of the shared control channel so as not to exceed the maximum transmission power.

7. The radio communications control system as set forth in

claim 6, wherein the maximum transmission power controller is arranged to control the maximum transmission power in accordance with a statistical value of the transmission power of the shared control channels.

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8. The radio communications control system as set forth in claim 6, wherein the maximum transmission power controller is arranged to control the maximum transmission power so as not to exceed an upper limit value per each of the shared control channels.

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9. A radio communications control method for controlling transmission power of a shared control channel for transmitting control signals to a plurality of mobile stations; the method comprising

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controlling the transmission power of the shared control channel, in accordance with transmission power of a dedicated channel accompanying the shared control channel, and communication quality of the shared control channel.

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